Library Services & Technology Act (LSTA) 2014 Grant Application

Library Development Office Indiana State Library 315 West Ohio Street Indianapolis, IN 46202 Telephone: (317) 232-3697 FAX number: (317) 232-0002

www.library.in.gov





Library Services and Technology Act Grant 2014 General Application Instructions

Thank you for your interest in a 2013 LSTA grant! This page will provide you with general application guidelines to reference as you prepare your application for submission. **Line-by-line application instructions are available** in a PowerPoint file downloadable from the Grant Application page of the Indiana State Library website: http://www.in.gov/library/3732.htm.

Grant Guidelines

A set of specific grant guidelines is accessible for each LSTA grant opportunity through the Indiana State Library main LSTA webpage: http://www.in.gov/library/lsta.htm.

Review the guidelines in their entirety; they not only describe the grant opportunity but also provide the application deadline, submission mailing address and instructions for any required application supplements. Incomplete applications will not be reviewed.

Application Form

Text boxes will expand as you type but please **limit your answers to any one question to a maximum of one page.** We do expect you will need **at minimum one paragraph** to answer most questions.

If you are unsure how to answer an application question, **please call the LSTA Grant Consultant** for help at **(317) 234-6550**.

Project Budget

With your application form, you will submit a Project Budget. The Project Budget will inform Part VIII of the application form, the Project Budget Narrative. For this reason, you will want to craft your Project Budget before you finish the application form. The Project Budget worksheet is located on our Grant Application webpage: http://www.in.gov/library/3732.htm.

Digitization Application Supplements

Supplemental questions for Indiana Memory Digitization grant applications can be found in *Appendix A* of the digitization grant guidelines. Submit a document answering each question in *Appendix A* with your completed application form and project budget.

Application Submission

To apply, **you must mail or hand deliver** one signed original of the application form, a budget worksheet, and any required supplements to the address provided in your grant guidelines. **You must ALSO e-mail a copy** of all application materials to the Library Development Office at LDO@library.in.gov. Please refer to your grant guidelines for more information. Faxed applications will **not** be accepted.



LIBRARY SERVICES AND TECHNOLOGY ACT GRANT APPLICATION

State Form 53456 (R6 / 12-13) INDIANA STATE LIBRARY

GENERAL INFORMATION							
Grant Program		mory Digitization Technology			Information Access for the Unserved		
please mark with an X		X					
Project Title	ject Title MAKEing a Difference at the Perry Meridian Middle School Library						
Organization	Perry Meridi	Perry Meridian Middle School					
Full Mailing Address	202 W. Meri	dian School Road, I	ndianapol	is, Indiana 4621	7		
Web Address	http://www.	msdpt.k12.in.us/					
Organization Director	Principal			E-mail Address			
Telephone Number	(317) XXX-XX	XX		Fax Number	(317)		
Project Director contact for grant purposes	School Libra	rian		E-mail Address			
Telephone Number	(317) XXX-XX	XX		Fax Number	(317)		
Fiscal Agent responsible for fiscal reporting	School Libra	rian		E-mail Address			
Telephone Number	(317) XXX_X	······································		Fax Number	(317)		
Federal Congressional District(s)		5th		County		Marion	
Estimated Number of People Serve Project During Grant Period	d by	1,056		LSTA Amount Re	LSTA Amount Requested 10,000		
Source of this Number US Census, library circulation recor	Indiana Department of Education - COMPASS		Amount of Cash	Match	1,100		
FEIN Number/Tax ID Number		xxxxxxxxx		Total Cost of Project		11,100	
Federal DUNS Number If unsure of this number, call 1-866	xxxxxxxxx						
FEDERAL LIBRARY SERVICES AN	D TECHNOLOGY	ACT (LSTA) PRIOR	RITIES				
$\ \square$ Mark ONLY ONE with an X to in	dicate the PRIMA	ARY purpose that bes	t describes	your project.			
x Expand services for learning a individuals of all ages.	and access to info	ormation and educati	onal resour	ces in a variety of	formats, in	all types of libraries, for	
Establish or enhance electron	ic and other link	ages between and im	prove coor	dination to improv	e library ser	vices.	
Provide training and profession	onal developmen	t to enhance the skill	s of the cui	rrent and future lil	orary workfo	orce.	
Develop public and private pa							
Target library services to indi functional literacy or informa		e geographic, cultura	i, and socio	economic backgro	unds, with d	disabilities, and with limited	
Target library and information children from families with in	•		using a lib	rary and to unders	erved urban	and rural communities, including	
Develop library services that and networks	Develop library services that provide all users access to information through local, state, regional, national and international collaborations						
INDIANA STATE LIBRARY LSTA	GOALS						
☐ Mark ONLY ONE with an X to in	dicate the PRIMA	ARY purpose that bes	t describes	your project.			
Information Access - Indiana technology, and resources. (ective telecommunications,	
Enhanced Services – Indiana X civic engagement. (Includes p	Enhanced Services – Indiana libraries will improve services to residents, including services that support lifelong learning, employment, and						
Capacity Building - Indiana lil	braries will impro	ve the capacity of lib	raries thro	ugh staff developr	nent and tra	ining opportunities.	

PRIMARY PROJECT AUDIENCE						
	☐ Mark next to AT LEAST ONE but NO MORE THAN THREE with an X to indicate your primary audience(s) for the project.					
Pre-Schoolers (0-5)		Seniors (65+)	Х	Urban Populations		
	Children (6-12)		People with Special Needs		Institutionalized Persons	
Х	Youth (13-17)		Library Staff		Non- or Limited English Speakers	
	Adults (18-64)		Rural Populations		Statewide Public	

PART I. PROJECT SUMMARY

Provide an abstract describing all project components in 150 words or less.

Evidence Based Instruction (EBI) requires a frequent examination of the school library program to compare it to best practices, guided by the most recent understandings and research. "MAKEing a Difference at the Perry Meridian Middle School Library" uses the wisdom of current research about this generation of students, poverty, and learning to develop guiding principles for the new school library. Students move beyond research to create; putting the fun back into learning with a place and time to explore while bringing back their child-like enthusiasm. With implementation of a makerspace, the role of the librarian within the school evolves. The school library becomes a community destination where patrons can create, problem solve, and mentor. They develop skills, talents, thinking, interests, and mental rigor. The library becomes a place to redesign the learning and doing and creating for the inventor, artist, technologist, hobbyist, storyteller, tinkerer, and dreamer through library makerspace programming.

Reference: Whitehurst, Grover P., Assistant Secretary. "Archived Information: Evidence-Based Education (EBE)." Office of Education Research and Improvement. http://www.ed.gov/offices/OERI/presentations/evidencebase.html

PART II. NEEDS STATEMENT

Describe the need or problem that generated this project and explain how you determined this need.

Perry Meridian Middle School currently serves over 1,100 Indiana youth in 7th and 8th grade. Of those students, 54% participate in the free and reduced school lunch program, an indicator of low socioeconomic conditions. As the 12th largest school district in Indiana, the district serves almost 15,000 students in preschool through 12th grade. The school district draws the majority of students from Perry Township, an urban community on the southern side of the Indianapolis metropolitan area. It has 11 elementary schools, 2 sixth-grade buildings, 2 middle schools (grade 7-8), 2 high schools (grades 9-12), an Alternative Education school, a preschool, and a special services facility (special education cooperative). With nearly 17% of the student population English Language Learners, the Chin refugee/immigrant population has changed the demographic profile of the schools.

Due to the socioeconomic and cultural nature of our student population, there is a lack of experiences in the regular classroom which are needed to fully develop thinking into the modality of a lifelong learner. There is a correlation between a child's socioeconomic condition and a developed literacy, which are essential, determining factors for entry-level workplace and college (trade, technical, 2-year, 4-year) readiness and success (ACT 2006). To develop lifelong learners, students need materials, tools, and the space to develop higher order thinking, hands-on, problem solving experiences and independent thought. This aligns with the school library's mission statement to "provide resources and services which allow students and teachers to be effective users of information in a variety of formats."

Many of our students were born into generational poverty and require teaching to their values, interests and abilities to develop and sustain a learner. For this generation, entertainment and technology is regarded the highest, therefore learning needs to geared toward experiences which develop independence and advanced thinking in a hands-on, interesting format. A makerspace is an exciting venue and opportunity for school libraries to take that next evolutionary step toward making the library a destination, instead of a fly-by stop. Chris Anderson, author of 'Makers: The New Industrial Revolution' argues that America is currently in the clutches of a new industrial revolution of inventors and entrepreneurs successfully designing and producing on a smaller scale of micro-manufacturing, making it possible for each of us to be an aspiring creative genius and a success story (Anderson 2012). A makerspace is a community destinations where students, sometimes alongside staff, parents, and mentors can create, problem solve, sample new ideas, and develop tactile skills, talents, thinking, and mental rigor.

The library makerspace revolution is forward thinking and progressive, yet brings us back to our country's historical ingenuity roots of basement tinkerers, hobbyists, and artisans. The role of the school librarian and the school library within the school community is ever changing as the needs of the community changes and human thinking, interaction, and learning processes evolve. School libraries have always been a destination of thinking and learning, but now they should also be the destination of doing, creating, and producing. The library becomes a place to reinvent the learning and doing and creating for the inventor, artist, craftsmen, industrial technologist, hobbyist, storyteller, cook, tinkerer, dreamer, and do-it-yourselfer. A maker organization for adults is different than a makerspace for public libraries, which is different than a makerspace for school libraries. A true maker organization for adults is a collaborative environment of idea sharing, problem-solving, constructivism, crafting, and engineering, with a heavy dose of tech gadgets. Athough this is ideal, it is unrealistic in public school environments to build this sort of community within the school. Start-up costs are insurmountably expensive and out of the realm of the school and library budget. It is therefore necessary to seek outside funding to support the higher-level thinking, learning, and creating vital to this generation of school library patrons.

References:

Anderson, Chris. Makers: The New Industrial Revolution. New York: Crown Business, 2012.

Atwater-Singer, Meg and Kate Sherrill. (2007). Social Software, Web 2.0, Library 2.0, & You: A Practical Guide for Using Technology @ Your Library. Indiana libraries, 26(3), 48-52.

Britton, Lauren. "A Fabulous Laboratory." Public Libraries, July/August 2012: 30-33.

Brown, Stephen. "John Seely Brown on Motivating Learners." Big Thinkers Series Recorded March 06 2013. The Pearson Foundation. Web, http://www.edutopia.org/john-seely-brown-motivating-learners-

video?utm_source=facebook&utm_medium=pos&utm_campaign=video-seelytinker. "Indiana Accountability System for Academic Progress (ASAP)." Indiana Department of Education. 2005. http://www.doe.state.in.us/asap/welcome.html (Accessed 1 March 2007).

Indiana Department of Education. DOE Compass. http://compass.doe.in.gov/dashboard/overview.aspx?type=school&id=5319

Jenkins, Henry. Confronting the Challenges of Participatory Culture: Media Education for the 21st Century. Chicago: MacArthur Foundation. 2006.

Payne, Ruby. A Framework for Understanding Poverty Third Revised Edition. Aha Process Inc., 2003.

Przeclawski, Gail and Christina Woods. "Literacy and Generational Poverty." AASL National Conference Session 1275. October 26, 2007.

Identify the goal from the Indiana State Library's Five-Year LSTA Plan (posted at http://www.IN.gov/library/lsta.htm) that your project will address and explain how your project will address this goal.

Indiana State Library Goal 2: Enhance Services -"The Indiana State Library will aid libraries in improving services to Indiana residents, including services that support lifelong learning, employment, and civic engagement."

The four key components to inquiry, lifelong learning, and the American Association of School Librarians (AASL) Standards for the 21st-Century Learner are think, create, share, and grow. Examine these four words; simple words yet complex learning and thinking concepts. They are integral to the newest advancement in school libraries and school librarianship. A library makerspace exists on the same founding principles as the national standards for student learning: thinking, creating, sharing, and growing. It is a place to develop guided experiences to build foundational skills and facilitate independent making and thinking opportunities.

A makerspace is a place for students to be active learners. A safe place to creatively construct, problem solve, and question current thinking and ways of doing. It is a place to build cognitive, kinesthetic, and social skills. Through makerspace activities, students build core skills: dexterity, thinking, problem solving, following step-by-step instructions, teamwork, patience, endurance, and the ability to try new things. From guided learning experiences (workshops), students become inspired and more independent. Students then begin building on their personal interests, and becoming inspired to try new things in the flexible makerspace environment. When envisioning our makerspace, think how exciting it would be to blend industrial technology, art, family and consumer science, crafting, science, self-publishing, digital media construction, engineering, tinkering, and recycling into one space.

Achieving Indiana State Library Goal 2 can also be explained through the school and education platform of the Common Core College and Career Readiness Anchor Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects:

- Integration of Knowledge and Ideas (standards 7, 9)- Any make, but especially an independent challenge, requires participants to learn from a variety of sources to build knowledge. Building understanding as a maker often means learning from experts by reading and seeing it in action, before doing. As makers inquire, it is important for them to recognize conflicting information or discrepancies amongst sources. As the student reads and learns, he may find that there is more than one way to create, or more than one solution, so he will need to analyze the information and work on problem-solving for the best possible solution for himself and for his situation.
- Range and Reading and Level of Text Complexity (standard 10)- In order for students to learn and grow in a maker environment, it is important to build their knowledge and experience in stages to ensure new, more complicated learning is built upon the foundation of prior learning and experiences. In this way, students can read and comprehend more complex text with new, advanced vocabulary and thinking specific to the task.
- Text Types and Purposes (standard 2, 4, 6)- Students in a makerspace learn, and as they learn, they create, and as they create, they communicate their knowledge and experiences with others. This is done through informative and explanatory texts used to convey the need, purpose, and step-by-step guidance for replication. Writing for this strong purpose requires the writer to produce clear and coherent writing in which the development, organization, and style are appropriate to the task, purpose, and audience.
- Research to Build and Present Knowledge (standard 8)- While investigating a potential make opportunity, inquiry is key. Students hone research skills with a range of resources, evaluating the integrity and validity of the resources throughout the journey. As the experience progresses, students will need to blend what is learned, building upon that foundation to create new knowledge, yet giving credit to resources, experts, and inspirations in order to avoid plagiarism.
- Comprehension and Collaboration (standard 1)- Through group makerspace projects, communication is essential. Students work together with others in groups. They could possibly call on an expert mentor either in person or virtually, and work within a cloud environment to communicate, share, and problem solve with others in their group, or other groups working on the same project but

in a different time, or even place.

- Presentation of Knowledge and Ideas (standard 4, 5)- Makers relate information through presentations within the local maker community. They create how-to visual guides to share on the web, step-by-step instructions for the school library makerspace, instructional videos, and presentations for events like a mini-Maker Faire. Through these complex communication tasks, students are learning how to communicate effectively.
- Mathematics: Standards for Mathematical Practice (standard 1, 3, 4, 6)- Practical math is integral to a technical make, like when working with computer coding. Math is key to a spatial make, such as designing a swing set for a local community center. Working individually or as a team to accurately calculate mathematical issues is integral to the success of many projects. When working within a maker team to construct a complicated make, it is often necessary to check others' work to ensure accuracy. Conversely, it is also important to be able to argue and defend when a student thinks their mathematical solution is justified. Mathematics will often be needed to solve simple spatial or more complex, electronic problems within the context of the make. Students will need to take what they know about math and apply it to solve problems or find solutions within the make. Integral to a makerspace is sharing make experiences, problems, solutions, and how others could replicate a success. To be able to share with others how to make something, the maker must be precise in instructions, including communicating accurate mathematical formulas and measurements.

References:

American Library Association, "AASL Standards for the 21st-Century Learner." Last modified November 08, 2006. http://www.ala.org/aasl/standards-guidelines/learning-standards. Document ID: ec710ea2-99a2-27d4-b987-e042c9f4bf3f

American Library Association, "Learning4Life." Last modified September 06, 2012. http://www.ala.org/aasl/learning4life. Document ID: 04376c42-4519-56f4-91e5-74a8553d5320

National Governors Association Center for Best Practices, Council of Chief State School Officers, "Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects."

2010.http://www.corestandards.org/assets/CCSSI ELA Standards.pdf.

National Governors Association Center for Best Practices, Council of Chief State School Officers, "Common Core Standards for Mathematics." 2010. http://www.corestandards.org/assets/CCSSI_Math Standards.pdf. O'Duinn, Fiacre. Maker Librarian. 2013. http://www.makerlibrarian.com/ (accessed February 17, 2013).

PART III. OBJECTIVES, ACTIVITIES, & EVALUATION

OBJECTIVES

Describe the overall objectives of your project.

GOAL: The goal of "MAKEing a Difference at the Perry Meridina Middle School Library" is to increase library use and patron engagement through the development of a school library makerspace, hosting frequent make workshops, and creating self-guided resources (pathfinders) for autonomous learning. The Library Makerspace is an extension of the new school library and provides students the opportunity and resources to:

- 1. gain background knowledge about a make topic (THINK).
- 2. construct, as an individual or group, a variety of guided makes (CREATE).
- 3. find new personal interests with new making experiences and extend learning through personal inquiry (GROW).
- 4. share new knowledge, makes, and how-to-make with others (SHARE).

MISSION: It is the mission of the Library Makerspace to extend learning through opportunities to think, create, share, and grow independently during experimentation with STEAM (science, technology, engineering, the arts, mathematics).

Objectives:

- 1. A committee of school community stakeholders will be established.
- 2. The school library will be redesigned to accommodate a makerspace as a patron focus.
- 3. Year-long library makerspace programming and events will be developed and implemented.
- 4. A plan will be designed for students to use the library makerspace as an independent study tool and independent growth model.

ACTIVITIES

Describe all project activities in detail.

MAKERSPACE COMMITTEE: A committee of faculty and administrators will be formed to develop the foundational principles of the Library Makerspace as outlined here. The committee will be expanded to invite students, support staff, and parents. This committee will assist in the implementation process and ongoing development of programming, resources, tools, staff orientation, and student training.

FACILITY & TOOLS: The committee will examine the school library space and develop a plan based on long-range goals for the makerspace to redesign the library layout. The new library will accommodate our updated vision of a community-based, hands-on learning library and makerspace.

GUIDED LEARNING: It is important for patrons to have creative freedom in this space, but even with artistic flexibility, guidance is needed. Students learn through a range of text, visual, verbal, and kinesthetic clues. Patrons will be able to sample the makerspace through weekly guided workshops. Most of these activities will be with the school librarian leading with step-by-step instructions, but others will be more free-flowing with the materials made available to patrons with limited instruction from the librarian and classroom teachers who will remain involved for guidance and support.

PATHFINDERS:Pathfinders have been a staple of information communication in libraries for decades and are still an excellent concept for sharing, whether web-based or a paper copy. Pathfinders are subject guides, information portals, and resource lists for independent makerspace learning. Library pathifinders will be maintained for each makerspace station. This will allow for learning to occur at point of need and at an at-your-own-pace for each individual. Pathfinders will be developed for the beginning, intermediate and advanced maker for each station. Each pathfinder will be customized for each specific station with recommendations for books, websites, community places, events, and organizations participants can go to for further learning and related activities to do on their own and grow from a novice to an experienced maker on that topic.

COMMUNICATION: Promotion of the library makerspace will occur through a variety of written and visual means. Signs and posters will be put up throughout the school promoting participation. Announcements and advertisements will be posted in the student newsletter, on the school website, and incorporated into the televised student news broadcast. Photos and press releases of makerspace activities will be distributed to the district Public Relations Director.

PARTICIPATION RECOGNITION and BADGES: It is human nature to feel intrinsically good about successes. There is a sense of self-satisfaction in fulfilling a task and seeing the accomplishment of a final product. School libraries are promoters of lifelong learning and self-edification. A library's collection, both digital and print, and environmental, are to support the quest for independent thought and lifelong learning. Those successes can also be measured with a small, yet significant and symbolic, extrinsic marker of learning and success. The Makerspace Committee will design participation badges and independent learning badges for patrons to earn. Patrons will be able to collect participation badges for participating in and completing a makerspace guided workshop. Independent makers will also be able to earn and collect beginner, intermediate and advanced maker badges based on their autonomous learning and making in the library makerspace.

WEEKLY WORKSHOPS: Each week a make workshop will be hosted by the library. Through these makes, students will sample new experiences and technologies with the goal that patrons will return to use the library and go back to the makerspace to learn and do more independently. Training workshops will be hosted to increase students' abilities from using (participating in what others have created) and tinkering (making personal changes to others' creations) to the more advanced level of independence in experimenting (modifying and testing theories; learning from failures and success) and creating (novel products; ideas; invention or action that make a difference or lead to a career).

TRAINING and SAFETY: Safety, equipment and resource training will be hosted on an as-needed basis to individuals and groups. Safety will align with the following basic tenents:

- 1. Listen carefully when instructions are given.
- 2. Treat yourself and others with respect. Be courteous.
- 3. Safety and training are required before use of any tools or equipment. Certain tools require protective gear, which must be worn when operating or being near the tool.
- 4. Use safety guidelines and common sense at all times.
- 5. Clean up before leaving.
- 6. Follow Mustang Maker rules and procedures at all times.
- 7. Unsafe conduct, lack of courtesy, disrespect, or disregard for the rules will result in the loss of the privilege to participate.

Makerspace Focus Themes: Each station will exhibit instructional signs, resources, manuals and pathfinders.

Station 1- Digital Video Production

Station 2- Music Composition

Station 3- Electronics

Station 4- Digital Fine Arts

Station 5- Desktop Publishing

Station 6- Micro-manufacturing and Fabrication

Station 7- Architecture, Urban Planning & Creative Design

Station 8- Graphic Design, Photography

Station 9- Upcycling (using old materials for a new purpose)

Station 10- Textiles & Sewing

Station 11- Coding

Station 12 - Hobbies & Crafts Reinvented

References:

Derry, Bill, David Loertscher and Leslie Preddy. "uTEC Maker Model." Google Docs: http://goo.gl/5fxTke

Identify project staff and detail their individual roles in your proposed project.

School Librarian: The school librarian will be responsible for overseeing the makerspace committee and implementing their master plan. She will manage the day-to-day workings of the makerspace, ensuring purchases are placed and received, hosting (or arranging guest hosts) guided makerspace workshops, filing all grant reports. She will design pathfinders for indpendent learning. She will mentor, teach, and model for individuals and small groups.

Committee: The committee will be responsible for guiding and advising the school librarian on redesigning the school library, makerspace events, and communicating to and training the rest of the staff on the makerspace. The committee will assist other faculty in incorporating the makerspace into advanced learning outcomes. The committee members will work together to design the participation certificate and badges.

School Principal: The school principal is responsible for providing time in faculty meetings for staff technology training and makerspace orientation.

Classroom Teachers: Teachers will participate in training and orientation opportunities hosted by the makerspace committee. Classroom teachers will differentiate learning by implementing makerspace learning opportunities to individual students.

Library Clerk: The clerk will prepare library reports for the school librarian. The clerk will manage the circulation desk and student library assistants in order to free the school librarian for mentoring and teaching in the makerspace.

PART IV. COMMUNICATION PLAN

Grantees are encouraged and expected to publicize the project through available and appropriate media outlets. How will you promote your project to your target audience?

A news report will be turned in to our Public Relations Director once a month. The report will include a photo and summary of the current activities of the library makerspace. These news reports will begin at the planning and design of the makerspace and continue through library programming and independent study opportunities and experiences. The Public Relations Director then may post our news on the school district website and get our makerspace publicized in local papers.

Weekly library makerspace announcements and upcoming activities will be promoted through articles in the school newsletter that goes home to parents and shared with administration in other schools.

For our student patrons, programs and events will be publicized through the student-produced televised annoucements (Mustang News), special displays, the in-house school information channel, the school library newsletter, and other means deemed appropriate by the makerspace committee.

How and when are you planning to share the results of your project beyond your local jurisdiction?

The school librarian will apply to share at the American Association of School Librarians (AASL) national conference, guest blog on the MakerBridge blog, and present through one of the American Library Association's webinars.

Is this project a model for replication? If so, please explain.

Yes, the school library makerspace can be replicated. A key component of the makerspace movement is the ability to share experiences and adapt what others have done to fit your community, your library, and your resources. The evolution and design of this makerspace and what we learn through the process can easily be shared with others and adapted or replicated for any school library.

All funded grant projects are required to acknowledge the IMLS on all products. For more information, go to http://www.imls.gov/recipients/communication.shtm.

PART V. EVALUATION PLAN

Outcomes Based Planning and Evaluation (OBPE) is the preferred evaluation method for your grant project.

Refer to http://www.shapingoutcomes.org/course for more information about Outcomes Based Planning and Evaluation (OBPE). If you are unfamiliar with the terms below, the site's Glossary of Terms is an excellent place to begin.

INPUTS

Equipment to produce 12 Makerspace stations.

Supplies and Tools to support Makerspace activities.

Staff time to redesign the school library to incorporate a Makerspace.

OUTPUTS

Number of patrons to utilize the Library Makerspace independently.

Number of workshops and trainings hosted by the Library Makerspace.

Number of patrons to attend Library Makerspace workshops and trainings.

Number of projects completed in the Library Makerspace.

OUTCOMES

Patrons choose to visit the school library more.

Patrons utilize the school library resources more.

Patrons learn and create through the Library Makerspace.

The School Librarian and committe develop programming and resources to support learning in 12 Makerspace stations.

EVALUATION PLAN OVERVIEW

Describe how you will determine whether the needs of your target group were met by your project. Then explain how you will measure the impact of the project on your target audience(s).

It is of utmost importance that the Makerspace learning and personal needs and interests of the school library patrons. To that end, the evaluation will focus on measuring the success of the Makerspace in quantitative and qualitative measures.

Destiny, the library automation system will be utilized to print reports, circulation from 2013-2014 to 2014-2015 utilizing Microsoft Excel to see whether the addition of the Makerspace increased circulation. A simple counting system will be implemented (marbles droped into a jar) to track the number of students entering the library, again comparing to the previous year to see if the addition of the Makerspace increases "foot traffic".

The library Makerspace will have a sign-in sheet on a clipboard at the entrance for users to sign and check with of the makerspace stations they will be utilizing with the goal of averaging 55 walk-ins to the makerspace each full week school is in session. This will also be a way to track the number of patrons who move from a guided workshop into more advanced, autonomous use of the makerspace.

Each full week of school a makerspace guided workshop will be hosted with a pre-registration sign-up required and the goal of 40 patrons signed up to attend each event. Each guided project will conclude with an exit slip to survey patron interest, but more importantly to guage how many of the guided makes were actually completed the attendee. The goal is to have three-fourths of all projects started in a guided workshop completed, but more importantly, tracking the project completing statistics will help us better understand which types of activities are more interesting to our patrons, and which independent skills with which our

patrons require more mentored guidance.

A final target indicator to ensure that we are prepared to meet the needs of our makerspace patrons is the creation and display or distribution of independent learning pathfinders for each of the Makerspace stations.

EVALUATION INDICATORS

- 1. Overall library circulation will increase by 10%.
- 2. Number of patrons independently accessing the school library will increase by 15%.
- 3. Patrons will access the Library Makerspace resources 125 times per week.
- 4. 40 patrons will sign up to attend each Library Makerspace workshop.
- 5. 75% of guided makes (workshops & trainings) started by patrons will be completed.
- 6. 10% of patrons to complete a guided make will move on to independent, advanced learning and create an autonomous make.
- 7. Pathfinder resources will be developed and utilized in coordination with the 12 Library Makerspace stations/themes.

EVALUATION METHODS

- 1. Library automation system circulation statistics reports
- 2. Independent student use of the school library (Excel) spreadsheet
- 3. Library Makerspace sign-in sheets
- 4. Workshop advance registration sign-up sheets
- 5. Workshop exit slips
- 6. Library Makerspace interest surveys
- 7. Online modules/pathfinders

PART VI. PROJECT TIMETABLE

Using as few or as many rows as you need, complete a timetable of activities for each aspect of your proposed project that describes what will be done and indicates by whom and when it will be done.

PROJECT IMPLEMENTATION

ACTIVITY	who	WHEN (month and year or "ongoing")
Refurbish donated CPU's	Perry Township Tech. Department	July
Reorganize Library to accommodate Library Makerspace	School Librarian	May-July
Establish Makerspace committee	School Librarian	May (then ongoing)
Purchase, Install & Train on Makerspace equipment & tools	School Librarian & Committee	August
Host weekly Makerspace workshops	School Librarian	ongoing
Publish and Promote Online Learning Modules & Pathfiners	School Librarian	ongoing
CC	OMMUNICATION	
ACTIVITY	wно	WHEN (month and year or "ongoing")
Advertisements in the School Newsletter, in-house television information channel, and promotions of upcoming Makerspace events on the student televised Mustsang News TV	School Librarian	ongoing
Press Releases and photos of the Library Makerspace activites, events, and patrons turned in to school district Public Relations Director for posting on the webpage and release to the local newspapers	School Librarian	ongoing
Makerspace Open House events (invite community to learn about and tour the new Makerspace) to coincide with Registration Day and Back to School Night in order to optimize attendance	School Librarian	August 2014
Apply to share activities and results at professional conferences	School Librarian	various state & national deadlines
	EVALUATION	
ACTIVITY	WHO	WHEN (month and year or "ongoing")
Exit Slips	School Librarian and attendees	ongoing
Maker Sign-In Records	School Librarian & Clerk	ongoing
Usage Statistics	School Librarian & Clerk	ongoing
Interest Surveys	School Librarian & Patrons	August
	REPORTING	
ACTIVITY	WHO	WHEN (month and year or "ongoing")
First Quarter Progress Report	Project Director	August 31, 2014

Second Quarter Progress Report	Project Director	November 30, 2014
Third Quarter Progress Report	Project Director	February 28, 2015
Financial Final Report	Project Director or Fiscal Agent	June 30, 2015
Narrative Final Report	Project Director	June 30, 2015

PART VII. CONTINUATION PLAN

Explain how activities or benefits from the project will continue after the LSTA funding period has ended or if the program will not be continued, explain why.

This grant will help fund start-up costs. The Library Makerspace and coinciding programming established through this grant will continue in perpetuity, adapting as the students and technology change and evolve. We anticipate using and updating the equipment, technology, and programming purchased through this grant for the Library Makerspace indefinitely and it is our goal to continually add pathfinders, workshops and events in order to meet the needs of continually evolving patrons and keep the makerspace fresh and interesting.

PART VIII. PROJECT BUDGET NARRATIVE

In narrative form by project budget category and funding source, describe your project budget items as listed in the Project Budget worksheet and briefly identify how they contribute to your proposed project. Be sure that each item for which you want LSTA funds is described in detail below. The Project Budget Narrative must match your Project Budget worksheet.

The Project Budget worksheet and guidelines on acceptable use of LSTA grant funds are available on our website: http://www.IN.gov/library/lsta.htm.

PERSONAL SERVICES

Describe budget items to be paid with LSTA funds.

n/a

Describe budget items to be paid through cost sharing (local cash or in-kind contributions).

The implementation and supervision of the makerspace will be incorporated into the ongoing responsibilities of the school librarian. Technical support will be the responsibility of the Help Desk and district technicians. Promotion, training and support will be the responsibility of the volunteer cadre of the Makerspace Committee.

SUPPLIES

Describe budget items to be paid with LSTA funds.

Station 4-Digital Fine Arts: The digital "pencil" Stylus for the Paper by Fifty Three app for emerging artists helps provide makers with a more realistic artist's experience while drawing, painting, and sketching on the iPad.

Station 6- Micro-manufacturing and Fabrication: A Cricut Explore Machine has a USB port and will take graphics custom created by the maker and cut them into cork, magnets, vinyl, cardstock, adhesive, vellus, chipboard, iron-on, and fabrics. This is a very versatile piece of equipment which will be useful for various activities at Station 9, Station 10, and Station 12 as well.

Station 7- Architecture, Urban Planning & Creative Design: Legos will allow students to problem solve construction and design. They are a tactile way to approach design and allow for student makers to follow guided, step-by-step instructions or create their own architectural masterpiece.

Station 10- Textiles & Sewing: As materials have improved and tools have advanced, it has altered the landscape of textiles and sewing. Through these tools, makers can begin at an entry-level to try projects that otherwise would have been overwhelming in complexity. Supplies and tools needed to simplify and improve the effectiveness of Station 10 are looms, hoops, floss, notions, and two nested sewing tables with wheels.

Describe budget items to be paid through cost sharing (local cash or in-kind contributions).

Project Kits are pre-packaged makerspace activities to use during the guided workshops. These will be helpful for both the inexperienced maker and the makerspace coordinator to learn and experience new things. These kits will be purchased through a supporting grant from the Perry Township Education Foundation (PTEF).

A core collection of supplies and tools, provided with a supporting grant by PTEF, will be needed for many of the stations, including but not limited to Station 3, Station 6, Station 7, Station 9, Station 10, and Station 12. Supplies and tools needed include bowls, brushes, scissors, spray bottles, hammer, mallet, screwdrivers, wrenches, duct tape, varnish, wire, fabric, glues, beads, metal, wood, bleach, and sandpaper.

Badges- Participation and skills badges will be awarded to makers for attending workshops and independently working on increasing their skill levels in particular tasks. Each badge will be custom designed by the committee to align with the skill and activity. Badges will be created with laser printer round glossy labels printed on the school's prexisting color printers.

OTHER SERVICES & CHARGES

Describe budget items to be paid with LSTA funds.

n/a

Describe budget items to be paid through cost sharing (local cash or in-kind contributions).

n/a

CAPITAL OUTLAYS

Describe budget items to be paid with LSTA funds.

Station 1- Digital Video Production: Director Suite is a robust, yet intuitive software for video editing. A recording/podcasting mic kit will be necessary for recording narration and voice over into the digital video. A portable green screen and portable light kit will allow student makers to record their productions in a more professional manner.

Station 2- Music Composition: Notation Composer and Notation Music are programs for the budding musician. The education version of Notation Composer will allow for editing and arranging the student's own sheet music and Notation Music will allow a student to add lyrics to a composition and convert an audio file to sheet music for a variety of instruments. A Go Mic USB microphone recorder will be utilized for recording musical productions to download into the Notation Composer and Notation Music.

Station 3- Electronics: LittleBits and LittleBits mounting boards are open source magnetic electronics. This is a safe and easy way to incorporate electronics into the makerspace for the beginner. Students will use these components to make their creations move, talk, blink, flash, spin, and much more.

Station 4- Digital Fine Arts: Paper by Fifty Three is an artists app for the iPad. With an iPad and this app, the artist can recreate the look of pencil, watercolor, ink. Completed works can even be printed and published into a book of artwork.

Station 5- Desktop Publishing: Page Plus and Page Plus Essentail are computer programs for student makers to be able to write self-publishing books into e-book or pdf format. Comic Creator, Manga Studio, and Comic Life are desktop publishing programs for students interested in writing graphic novels and comics. Each program is for a different interest, but all allow for artwork and original text. Comic Life is for incorporating original photographs as the comic graphics, Comic Creator is for designing your own artwork, and Manga Studio is for the advanced writer and specifically for creating manga style graphic novels.

Station 6- Micro-manufacturing and Fabrication: A Cricut Explore Machine has a USB port and will take graphics custom created by the maker and cut them into cork, magnets, vinyl, cardstock, adhesive, vellus, chipboard, iron-on, and fabrics. This is a very versatile piece of equipment which will be useful for various activities at Station 9, Station 10, and Station 12 as well.

Station 7- Architecture, Urban Planning & Creative Design: Minecraft is a computer game version of legos where makers interact in a mock-3D world of their making by placing and breaking various kinds of blocks.

Station 8- Graphic Design, Photography: PicMonkey Royale is a web-based program which will allow student makers to edit digital photos. The Savage Green Screen Photo Creator Kit is a computer program for easily removing green screen background from photos with over 700 replacement backgrounds.

Station 11- Coding: With the help of a desktop computer and Alice, free educational software and tools to teach students computer programming in a 3D environment, makers will learn programming basics. From there, students will use Scratch, free from MIT Media Labs, to code stories, games, animation and much more.

Station 12 - Hobbies & Crafts Reinvented: An ABS 3Doodler is a 3D printing pen. Among the opportunities in Station 12, students will be able to use the 3Doodlers and to print or draw in plastics, which can then be connected to make 3-dimensional designs.

Computers - Due to the robust memory requirements for graphics and processing needed for some stations, four new desktop CPU's will be purchased and dedication to makerspace Station 1 (digital video production), Station 5 (desktop publishing), Station 6 (micro-manufacturing and fabrication), and Station 8 (graphic design and photography).

In order to support the expanded power needs of the makerspace, four versatile electrical rotating outlet surge protectors will be utilized. Each of these new outlets will include two USB charging ports and four grounded electrical outlets.

Describe budget items to be paid through cost sharing (local cash or in-kind contributions).

Through the Perry Township Education Foundation (PTEF) 2 craft ovens and a microwave will be purchased for the makerspace. These will be used primarily with Station 9 (Upcycling) and Station 12 (Hobbies & Crafts Reinvented).

In-Kind Contributions

Please note: The following are not listed in the budget, but gently used items donated to the start-up of the makerspace: 2 sewing machines, 5 still digital cameras, 2 camera tripods, 2 tripod dollys, 4 USB pocket video cameras, 10 stand-alone (non-networked) CPU's and 14 monitors.

PART IX. ASSURANCES

The Institute of Museum & Library Services (IMLS) requires the Indiana State Library to obtain certification from its sub-grant applicants regarding federal debt status, debarment and suspension, non-discrimination, a drug-free workplace, and other applicable assurances. These requirements are incorporated in the Assurances Statement below. Review the Statement and sign the certification form. If you receive a grant, you must comply with these requirements.

By signing the application form, the authorizing official, on behalf of the applicant, assures and certifies that, should a sub-grant be awarded, it will comply with the statutes outlined and all related IMLS and ISL regulations. These assurances shall obligate the applicant for the period during which Federal financial assistance is extended. The applicant recognizes and agrees that any such assistance will be extended in reliance on the representations and agreements made in these assurances, and that the United States government has the right to seek judicial enforcement of these assurances, which are binding on the applicant, its successors, transferees, and assignees, and on the authorized official whose signature appears on the application form.

Certifications Required of All Applicants

- 1. Financial, Administrative, and Legal Accountability;
- 2. Debarment and Suspension;
- 3. Non-Discrimination;
- 4. Drug-Free Workplace Act of 1988
- 5. Lobbying
- 6. E-Verify Employment Eligibility Verification
- 7. State Ethics Laws
- 8. Information Technology Accessibility Standards; and
- 9. Telephone Solicitations Laws

Certification of Authorizing Officials

I have examined this application, and I hereby certify on behalf of the applicant organization that:

- 1. The information provided is true and correct;
- 2. All requirements for a complete LSTA Grant application have been fulfilled;
- 3. The applicant will comply with all applicable payment, accounting, and reporting requirements; and
- 4. The applicant will comply with applicable certifications regarding Items 1-9 listed above under Certifications Required of All Applicants.

We, the undersigned, hereby certify that should this organization receive a sub-grant, the organization and its leaders will comply with all LSTA regulations, all statues outlined, requirements as defined by the Indiana State Library (*Managing Your LSTA Grant*), and all applicable Federal statutes and regulations.

Name of Organization	Project Title	Submission Date (month, day, year)
Perry Meridian Middle School	MAKEing a Difference at the Perry Meridian Middle School Library	March 6, 2014

Title of Principal Officer	Signature of Principal Officer	Signature Date (month, day, year)	
School Librarian		March 6, 2014	

STATE LIBRARY USE ONLY							
Project Number Approved Not Approved Amount Awarded						led	
Library Torre	Public	School	Academic	Special	Multi-Type	SLAA	Institutional
Library Type							